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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ANDREW D. FLOCKHART and ROBERT C. STEINER

Appeal 2015-005160[1]
Application 13/540,906[2]
Technology Center 3600

Before HUBERT C. LORIN, NINA L. MEDLOCK, and
BRUCE T. WIEDER, *Administrative Patent Judges*.

MEDLOCK, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 5–24. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

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[1] Our decision references Appellants' Appeal Brief ("App. Br.," filed October 8, 2014) and Reply Brief ("Reply Br.," filed April 6, 2015), and the Examiner's Answer ("Ans.," mailed February 6, 2015) and Final Office Action ("Final Act.," mailed May 6, 2014).

[2] Appellants identify Avaya, Inc. as the real party in interest. App. Br. 2.

CLAIMED INVENTION

Appellants' claimed invention "is directed generally to servicing a contactor in a contact center and specifically to allocating work items among contact center resources" (Spec. 1, ll. 11–12).

Claims 5 and 9 are the independent claims on appeal. Claim 5, reproduced below, is illustrative of the claimed subject matter:

> 5. A method for servicing work items in a contact center, each work item representing a customer contact with the contact center and being represented in the contact center as a data structure stored in a tangible, non-transitory computer readable medium of the contact center, the contact center having a plurality of contact center performance goals, comprising:
>
> selecting a multi-skilled agent for servicing one of a plurality of different types of queued work items;
>
> determining, for each contact center performance goal, a status of goal realization based on data related to the contact center performance goal, wherein each of the contact center performance goals is based on a service level value for a set of contact center data and is not based on a particular agent;
>
> after determining the status of goal realization, selecting one of the multi-skilled agent's skills based, at least in part, on the status of goal realization; and
>
> selecting, after selecting of the multi-skilled agent and based on the selected skill, one of the plurality of different types of queued work items for servicing by the multi-skilled agent, wherein the multi-skilled agent is a[n] agent that services the selected queued work item.

REJECTIONS

Claims 5–24 are rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter.

Claims 5–19 are rejected under 35 U.S.C. § 103(a) as unpatentable over Wu et al. (US 7,372,952 B1, iss. May 13, 2008) (hereinafter "Wu"),

Cohen et al. (US 6,700,971 B1, iss. Mar. 2, 2004) (hereinafter "Cohen"), and Flockhart et al. (US 6,661,889 B1, iss. Dec. 9, 2003) (hereinafter "Flockhart").[3]

Claims 20–24 are rejected under § 103(a) as unpatentable over Wu, Cohen, Flockhart, and Gruia et al. (US 6,621,901 B1, iss. Sept. 16, 2003) (hereinafter "Gruia").

ANALYSIS

Non-Statutory Subject Matter

Appellants argue claims 5–24 as a group (Reply Br. 2–5). We select independent claim 5 as representative. The remaining claims stand or fall with claim 5. *See* 37 C.F.R. §41.37(c)(1)(iv).

Under 35 U.S.C. § 101, an invention is patent-eligible if it claims a "new and useful process, machine, manufacture, or composition of matter." 35 U.S.C. § 101. The Supreme Court, however, has long interpreted § 101 to include an implicit exception: "[l]aws of nature, natural phenomena, and abstract ideas" are not patentable. *See, e.g.*, *Alice Corp. Pty Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2354 (2014).

The Supreme Court, in *Alice*, reiterated the two-step framework previously set forth in *Mayo Collaborative Services v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1300 (2012), "for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of these concepts." *Alice Corp.*, 134 S. Ct.

[3] We understand, based on the discussion at pages 8–10 of the Final Office Action, that claims 14 and 17 are rejected under § 103(a) as unpatentable over Wu, Cohen, and Flockhart.

at 2355. The first step in that analysis is to "determine whether the claims at issue are directed to one of those patent-ineligible concepts," *id.*, e.g., to an abstract idea. If the claims are not directed to a patent-ineligible concept, the inquiry ends. Otherwise, the inquiry proceeds to the second step where the elements of the claims are considered "individually and 'as an ordered combination"' to determine whether there are additional elements that "'transform the nature of the claim' into a patent-eligible application." *Alice Corp.*, 134 S. Ct. at 2355 (quoting *Mayo*, 132 S. Ct. at 1297).

The Court acknowledged in *Mayo*, that "all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas." *Mayo*, 132 S. Ct. at 1293. We, therefore, look to whether the claims focus on a specific means or method that improves the relevant technology or are instead directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery. *See Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1336 (Fed. Cir. 2016).

In rejecting claims 5–24 under 35 U.S.C. § 101, the Examiner finds that the claims are directed to "the abstract idea of selecting work items for an agent based on the determined statuses of business performance goals in a contact center environment," and that although "the claims recite that the contact center is represented in a data structure stored in a tangible, non-transitory computer readable medium, these limitations are not enough to qualify as 'significantly more'" than the abstract idea itself (Ans. 2–3). Specifically referencing independent claims 5 and 9, the Examiner further finds that the limitations of claim 5 could be performed by a human operator by visually observing the claimed data structure on a computer screen, and

that claim 9 recites mere instructions to implement the abstract idea on a computer (*id.* at 3).

Appellants argue that claim 5 is not directed to an abstract idea because the claim requires "an agent's skills to be selected and the agent to service a selected item"; in other words, according to Appellants, "the agent, as claimed, must perform an act, and the performance of an action is not an abstract idea" (Reply Br. 4). That argument is not persuasive at least because claim 5 does not positively recite a step of "servicing a selected queued work item"; instead, the claim merely recites selecting a multi-skilled agent and selecting a queued work item for servicing by that agent.

Appellants' further arguments (i.e., (1) that "the present claims require an act, or a series of acts, performed upon the subject-matter to be transformed and reduced to a different state or thing" and (2) that "because an agent is selected and must perform a service as required by the present claims, the present claims require an element or combination of elements that is sufficient to ensure that the patent in practice amounts to significantly more than a patent upon any ineligible concept itself" (*see id.* at 4–5)), appears based on the same faulty premise, and are likewise unpersuasive of Examiner error.

We also are not persuaded by Appellants' argument that "the present claims do not prohibit others from practicing many other ways of administering a contact center" (*id.* at 5). The Supreme Court has described "the concern that drives this exclusionary principle [i.e., the exclusion of abstract ideas from patent eligible subject matter] as one of pre-emption." *See Alice*, 134 S. Ct. at 2354. But characterizing pre-emption as a driving concern for patent eligibility is not the same as characterizing pre-emption as

the sole test for patent eligibility. "The Supreme Court has made clear that the principle of preemption is the basis for the judicial exceptions to patentability" and "[f]or this reason, questions on preemption are inherent in and resolved by the § 101 analysis." *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed.Cir.2015) (citing *Alice*, 134 S. Ct. at 2354). Yet although "preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility." *Id.*

We are not persuaded for the reasons set forth above that the Examiner erred in rejecting claim 5 under 35 U.S.C. § 101. Therefore, we sustain the Examiner's rejection of claim 5, and claims 6–24, which fall with claim 5.

Obviousness

Independent Claim 5 and Dependent Claims 6–8 and 14–19

Appellants argue that the Examiner erred in rejecting claim 5 under 35 U.S.C. § 103(a) because none of Wu, Cohen, and Flockhart, individually or in combination, discloses or suggests "determining, for each contact center performance goal, a status of goal realization" and "selecting one of the multi-skilled agent's skills based, at least in part, on the status of goal realization," as recited in claim 5 (App. Br. 6–8). The Examiner takes the position that Wu discloses the argued limitations at column 35, lines 54–67 and column 36, lines 15–23, and that Cohen also discloses this limitation at column 3, lines 46–55 (Final Act. 5–6). We agree with Appellants.

Wu is directed to a communications control system (Wu, Abstract), and discloses that an object of the invention to provide a method of selecting a call handling agent to handle a call, comprising the steps of identifying at least one characteristic of a call to be handled; determining a call center

load, and routing the call to an agent in dependence on the characteristic, call center load, and agent characteristics (*id.* at col. 33, ll. 55–64). Wu discloses at column 35, lines 54–67, cited by the Examiner, that each agent has a skill vector profile developed based on various efficiency or productivity criteria (e.g., in a sales position, productivity may be defined as sales volume or gross profits per call or per call minute, customer loyalty of past customers; efficiency may be defined in terms of minutes per call, customer loyalty after the call, customer satisfaction during the call, successful resolution of the problem), and that these profiles are accessible from a stored table. Wu discloses, at column 36, lines 15–23, that if peak instantaneous efficiency is desired, e.g., when the call center is near capacity, a skill-based call routing algorithm may be implemented, which optimizes a short term cost-utility function of the call center, and that an agent who can optimally handle the call is selected. But we find nothing in the cited portions of Wu that discloses or suggests "determining, for each contact center performance goal, a status of goal realization" and "selecting one of the multi-skilled agent's skills based, at least in part, on the status of goal realization," as recited in claim 5.

We also find no such disclosure or suggestion in Cohen at column 3, lines 46–55, on which the Examiner relies. Cohen discloses a contact-center monitoring system connected to a plurality of contact centers via a communications network, and discloses that the monitoring system periodically polls a contact center and obtains 24-hour interval data for a set of specified skills for a selected set of days (Cohen, col. 3, ll. 46–51). The system determines a value of a key attribute for each skill and compares the difference between the actual and an objective, target, value against a

tolerance parameter (*id.* at col. 3, ll. 51–55). But even assuming, for the sake of argument, that this comparison constitutes determining the status of goal realization, we find nothing in the cited portion of Cohen that discloses or suggests "selecting one of the multi-skilled agent's skills based, at least in part, on the status of goal realization," as called for in claim 5.

Responding to Appellants' arguments in the Answer, the Examiner asserts that "determining that a call center is at near capacity [as disclosed in Wu] meets the limitation of determining a status" (Ans. 3). But we find nothing in the cited portion of Wu that discloses or suggests that call center capacity constitutes or is otherwise related to a call center performance goal. As such, we fail to see how, and the Examiner does not explain how, "determining that a call center is at near capacity" discloses or suggests "determining the status of goal realization," as called for in claim 5.

Further addressing Appellants' arguments, the Examiner asserts that comparing an actual value to a target value, as disclosed in Cohen, "provides a status of performance" (*id.* at 4–5). But again, even assuming, for the sake of argument, that this comparison constitutes determining the status of goal realization, there is no disclosure or suggestion in the cited portion of Cohen of "selecting one of the multi-skilled agent's skills based, at least in part, on the status of goal realization," as called for in claim 5.

In view of the foregoing, we do not sustain the Examiner's rejection of independent claim 5 under 35 U.S.C. § 103(a). For the same reasons, we also do not sustain the Examiner's rejection of dependent claims 6–8 and 14–19. *Cf. In re Fritch*, 972 F.2d 1260, 1266 (Fed. Cir. 1992) ("dependent claims are nonobvious if the independent claims from which they depend are nonobvious").

Independent Claim 9 and Dependent Claims 10–13

Independent claim 9 includes language substantially similar to the language of claim 5, and stands rejected based on the same rationale applied with respect to claim 5 (Final Act. 5–7). Therefore, we do not sustain the Examiner's rejection under 35 U.S.C. § 103(a) of independent claim 9, and claims 10–13, which depend therefrom, for the same reasons set forth above with respect to claim 5.

Dependent Claims 20–24

Claims 20–24 depend, directly or indirectly, from independent claim 5. The rejection of these dependent claims does not cure the deficiency in the Examiner's rejection of claim 5. Therefore, we do not sustain the rejection of dependent claims 20–24 under 35 U.S.C. § 103(a) for the same reasons set forth above with respect to independent claim 5.

DECISION

The Examiner's rejection of claims 5–24 under 35 U.S.C. § 101 is affirmed.

The Examiner's rejections of claims 5–24 under 35 U.S.C. § 103(a) are reversed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED